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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,586	06/18/2001	Brij P. Giri	MDH-109-A	1602

7590 05/09/2003

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EXAMINER

GITOMER, RALPH J

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,586

Applicant(s)

Giri

Examiner

Ralph Gitomer

Art Unit

1651



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 4, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) 13-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Applicant's election with traverse of Group I, claims 1-12,
21 in Paper No. 3 is acknowledged. The traversal is on the
ground(s) that a search would encompass all the groups. This is
5 not found persuasive because the inventions are independent and
distinct for reasons given in addition to search issues.

The requirement is still deemed proper and is therefore made
FINAL.

The elected species is the definitions of claim 3(1)(a) and
10 claim 4. There are a number of issues in the claims under 35 USC
112 which will be considered after the rejections over references
are fully considered because no claims directed to the elected
subject matter are presented. For example, several claims lack a
period and the term ~~system~~ is not understood and is
15 nonstandard. Priority is granted to 6/17/2000.

The following is a quotation of 35 U.S.C. 103(a) which forms
the basis for all obviousness rejections set forth in this Office
20 action:

(a) A patent may not be obtained though the invention is not identically
disclosed or described as set forth in section 102 of this title, if the
differences between the subject matter sought to be patented and the prior
art are such that the subject matter as a whole would have been obvious at
25 the time the invention was made to a person having ordinary skill in the
art to which said subject matter pertains. Patentability shall not be
negativated by the manner in which the invention was made.

Claims 1-12, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Schaap, Bronstein, Akhavan-Tafti, and Adolfsen.

5 Schaap (Tetrahedron Letters Office of Naval Res) entitled
❖Chemical and Enzymatic Triggering of 1,2-Dioxetanes❖ teaches on
page 1 in the Figure, Structure 2, which meets the limitations of
present claim 3(1)(b) but not 3(1)(a) or claim 4.

10 Bronstein (WO 97/24460) entitled ❖Multiple Reporter Gene
Assay❖ teaches on page 11, structure I, which meets the
limitations of present claim 3(1)(b) but not 3(1)(a) or claim 4.

Bronstein (5,547,836) entitled ❖Enhancement of
Chemiluminescent Assays❖ teaches in column 4, a structure which
meets the limitations of present claim 3(1)(b) but not 3(1)(a) or
claim 4.

15 Bronstein (5,637,747) entitled ❖Syntheses of 1,2-Dioxetanes
and Intermediates Therefor❖ teaches in column 3, a dioxetane
where T can be a cycloalkylidene group which would read on
present claim 3(1)(a) and 3(1)(b) but not claim 4.

20 Akhavan-Tafti (5,777,135) entitled ❖Di-Substituted 1,2-
Dioxetane Compounds Having Increased Water Solubility and Assay
Compositions❖ teaches in column 7 line 40, a compound which meets
the limitations of present claim 3(1)(b) but not 3(1)(a) or claim
4.

Adolfson (5,631,167) entitled ~~Chemiluminescent~~ Capsule Chemistry Analytical Methods Employing Dioxetane Chemiluminescence~~Chemiluminescent~~ teaches in column 6, compounds which meet the limitations of present claim 3(1)(b) and 3(1)(a) but not claim 4 where R6 may have double bonds.

5 The claims differ from the above references in that limitations directed to the enhancer are not specified in all the above cited references as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an enhancer
10 with the dioxetane because such enhancers are well known in this art and to select specific enhancers for their known function would have been obvious in view of the references which teach enhancers in general. No unexpected results are seen in the presently claimed selection of enhancers.

15 Claims 1-12, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giri.

Giri (6,461,876) entitled ~~Chemiluminescent~~ Chemiluminescent Compounds~~Chemiluminescent~~
20 teaches in claim 4, the same compound as presently claimed in claim 4.

All the features of the claimed compounds are taught by Giri for the same function as claimed. The 102(e) date of Giri is 9/1998.

The claims differ from Giri in that they include an enhancer, although the claims are not directed towards a composition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an enhancer with the dioxetane because such enhancers are well known in this art and to select specific enhancers for their known function would have been obvious. No unexpected results are seen in the presently claimed selection of enhancers.

The title of the invention is not aptly descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following prior art pertinent to applicant's disclosure is made of record and not relied upon:

Bronstein (5,756,770) teaches dioxetane analogues.

Bronstein (4,956,477) teaches dioxetanes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ralph Gitomer whose telephone number is (703) 308-0732. The examiner can normally be reached on Tuesday-Friday from 8:00 am - 5:00 pm. The examiner can also be reached on alternate Mondays. If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Michael Wityshyn can be reached on (703)
308-4743. The fax phone number for this Art Unit is (703) 308-
4556. Any inquiry of a general nature or relating to the status
of this application should be directed to the Group receptionist
whose telephone number is (703) 308-1235. For 24 hour access to
patent application information 7 days per week, or for filing
applications electronically, please visit our website at
www.uspto.gov and click on the button Patent Electronic Business
Center for more information.



Ralph Gitomer
Primary Examiner
Group 1651

RALPH GITOMER
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GROUP 1200